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<110> Ono Pharmaceutical Co., LTD

<120> NOVEL PLASMID DNA COMPRISING REPORTER GENE DNA AND USE OF THE SAME

<130> Q57282

<140> 09/446,634
<141> 1999-12-23

<150> JP 9-171440
<151> 1997-06-27

<160> 24

<170> PatentIn version 3.2

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<220>
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tagatctcc 69

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Tyr Pro Tyr Asp Val Pro Asp Tyr Ala
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<212> PRT
<213> Homo sapiens

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Met Leu Gly Ile Trp Thr Leu Leu Pro Leu Val Leu Thr Ser Val Ala
-15 -10 -5 -1

Arg Leu Ser Ser Lys Ser Val Asn Ala Gln Val Thr Asp Ile Asn Ser
1 5 10 15

Lys Gly Leu Glu Leu Arg Lys Thr Val Thr Thr Val Glu Thr Gln Asn
20 25 30

Leu Glu Gly Leu His His Asp Gly Gln Phe Cys His Lys Pro Cys Pro
35 40 45

Pro Gly Glu Arg Lys Ala Arg Asp Cys Thr Val Asn Gly Asp Glu Pro
50 55 60

Asp Cys Val Pro Cys Gln Glu Gly Lys Glu Tyr Thr Asp Lys Ala His
65 70 75 80

Phe Ser Ser Lys Cys Arg Arg Cys Arg Leu Cys Asp Glu Gly His Gly
85 90 95

Leu Glu Val Glu Ile Asn Cys Thr Arg Thr Gln Asn Thr Lys Cys Arg
100 105 110

Cys Lys Pro Asn Phe Phe Cys Asn Ser Thr Val Cys Glu His Cys Asp
115 120 125

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Pro Cys Thr Lys Cys Glu His Gly Ile Ile Lys Glu Cys Thr Leu Thr
    130                 135                 140

Ser Asn Thr Lys Cys Lys Glu Glu Gly Ser Arg Ser Asn Leu Gly Trp
145                 150                 155                 160

Leu Cys Leu Leu Leu Leu Pro Ile Pro Leu Ile Val Trp Val Lys Arg
                165                 170                 175

Lys Glu Val Gln Lys Thr Cys Arg Lys His Arg Lys Glu Asn Gln Gly
            180                 185                 190

Ser His Glu Ser Pro Thr Leu Asn Pro Glu Thr Val Ala Ile Asn Leu
        195                 200                 205

Ser Asp Val Asp Leu Ser Lys Tyr Ile Thr Thr Ile Ala Gly Val Met
    210                 215                 220

Thr Leu Ser Gln Val Lys Gly Phe Val Arg Lys Asn Gly Val Asn Glu
225                 230                 235                 240

Ala Lys Ile Asp Glu Ile Lys Asn Asp Asn Val Gln Asp Thr Ala Glu
                245                 250                 255

Gln Lys Val Gln Leu Leu Arg Asn Trp His Gln Leu His Gly Lys Lys
            260                 265                 270

Glu Ala Tyr Asp Thr Leu Ile Lys Asp Leu Lys Lys Ala Asn Leu Cys
        275                 280                 285

Thr Leu Ala Glu Lys Ile Gln Thr Ile Ile Leu Lys Asp Ile Thr Ser
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Asp Ser Glu Asn Ser Asn Phe Arg Asn Glu Ile Gln Ser Leu Val
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<210> 23
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<213> Mus musculus

<400> 23

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Met Leu Trp Ile Trp Ala Val Leu Pro Leu Val Leu Ala Gly Ser Gln
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Leu Arg Val His Thr Gln Gly Thr Asn Ser Ile Ser Glu Ser Leu Lys
-5              -1  1               5                   10
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Leu Arg Arg Arg Val His Glu Thr Asp Lys Asn Cys Ser Glu Gly Leu
            15                  20                  25

Tyr Gln Gly Gly Pro Phe Cys Cys Gln Pro Cys Gln Pro Gly Lys Lys
        30                  35                  40

Lys Val Glu Asp Cys Lys Met Asn Gly Gly Thr Pro Thr Cys Ala Pro
    45                  50                  55

Cys Thr Glu Gly Lys Glu Tyr Met Asp Lys Asn His Tyr Ala Asp Lys
60                  65                  70                  75

Cys Arg Arg Cys Thr Leu Cys Asp Glu Glu His Gly Leu Glu Val Glu
                80                  85                  90

Thr Asn Cys Thr Leu Thr Gln Asn Thr Lys Cys Lys Cys Lys Pro Asp
            95                  100                 105

Phe Tyr Cys Asp Ser Pro Gly Cys Glu His Cys Val Arg Cys Ala Ser
        110                 115                 120

Cys Glu His Gly Thr Leu Glu Pro Cys Thr Ala Thr Ser Asn Thr Asn
    125                 130                 135

Cys Arg Lys Gln Ser Pro Arg Asn Arg Leu Trp Leu Leu Thr Ile Leu
140                 145                 150                 155

Val Leu Leu Ile Pro Leu Val Phe Ile Tyr Arg Lys Tyr Arg Lys Arg
                160                 165                 170

Lys Cys Trp Lys Arg Arg Gln Asp Asp Pro Glu Ser Arg Thr Ser Ser
            175                 180                 185

Arg Glu Thr Ile Pro Met Asn Ala Ser Asn Leu Ser Leu Ser Lys Tyr
        190                 195                 200

Ile Pro Arg Ile Ala Glu Asp Met Thr Ile Gln Glu Ala Lys Lys Phe
    205                 210                 215

Ala Arg Glu Asn Asn Ile Lys Glu Gly Lys Ile Asp Glu Ile Met His
220                 225                 230                 235

Asp Ser Ile Gln Asp Thr Ala Glu Gln Lys Val Gln Leu Leu Leu Cys
                240                 245                 250

Trp Tyr Gln Ser His Gly Lys Ser Asp Ala Tyr Gln Asp Leu Ile Lys
            255                 260                 265
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Gly Leu Lys Lys Ala Glu Cys Arg Arg Thr Leu Asp Lys Phe Gln Asp
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<220>
<223> T antigen-originated nuclear transport signal

<400> 24

Ala Pro Lys Lys Lys Arg Lys Val Gly
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SEQUENCE LISTING

<110> Ono Pharmaceutical Co., LTD

<120> NOVEL PLASMID DNA COMPRISING REPORTER GENE DNA AND USE OF THE SAME

<130> Q57282

<140> 09/446,634
<141> 1999-12-23

<150> JP 9-171440
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-15 -10 -5 -1

Arg Leu Ser Ser Lys Ser Val Asn Ala Gln Val Thr Asp Ile Asn Ser
1 5 10 15

Lys Gly Leu Glu Leu Arg Lys Thr Val Thr Thr Val Glu Thr Gln Asn
20 25 30

Leu Glu Gly Leu His His Asp Gly Gln Phe Cys His Lys Pro Cys Pro
35 40 45

Pro Gly Glu Arg Lys Ala Arg Asp Cys Thr Val Asn Gly Asp Glu Pro
50 55 60

Asp Cys Val Pro Cys Gln Glu Gly Lys Glu Tyr Thr Asp Lys Ala His
65 70 75 80

Phe Ser Ser Lys Cys Arg Arg Cys Arg Leu Cys Asp Glu Gly His Gly
85 90 95

Leu Glu Val Glu Ile Asn Cys Thr Arg Thr Gln Asn Thr Lys Cys Arg
100 105 110

Cys Lys Pro Asn Phe Phe Cys Asn Ser Thr Val Cys Glu His Cys Asp
115 120 125

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Pro Cys Thr Lys Cys Glu His Gly Ile Ile Lys Glu Cys Thr Leu Thr
    130                 135                 140

Ser Asn Thr Lys Cys Lys Glu Glu Gly Ser Arg Ser Asn Leu Gly Trp
145                 150                 155                 160

Leu Cys Leu Leu Leu Leu Pro Ile Pro Leu Ile Val Trp Val Lys Arg
                165                 170                 175

Lys Glu Val Gln Lys Thr Cys Arg Lys His Arg Lys Glu Asn Gln Gly
            180                 185                 190

Ser His Glu Ser Pro Thr Leu Asn Pro Glu Thr Val Ala Ile Asn Leu
        195                 200                 205

Ser Asp Val Asp Leu Ser Lys Tyr Ile Thr Thr Ile Ala Gly Val Met
    210                 215                 220

Thr Leu Ser Gln Val Lys Gly Phe Val Arg Lys Asn Gly Val Asn Glu
225                 230                 235                 240

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Gln Lys Val Gln Leu Leu Arg Asn Trp His Gln Leu His Gly Lys Lys
            260                 265                 270

Glu Ala Tyr Asp Thr Leu Ile Lys Asp Leu Lys Lys Ala Asn Leu Cys
        275                 280                 285

Thr Leu Ala Glu Lys Ile Gln Thr Ile Ile Leu Lys Asp Ile Thr Ser
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Asp Ser Glu Asn Ser Asn Phe Arg Asn Glu Ile Gln Ser Leu Val
305                 310                 315
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Leu Arg Val His Thr Gln Gly Thr Asn Ser Ile Ser Glu Ser Leu Lys
-5              -1  1               5                   10
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Leu Arg Arg Arg Val His Glu Thr Asp Lys Asn Cys Ser Glu Gly Leu
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Tyr Gln Gly Gly Pro Phe Cys Cys Gln Pro Cys Gln Pro Gly Lys Lys
           30                  35                  40

Lys Val Glu Asp Cys Lys Met Asn Gly Gly Thr Pro Thr Cys Ala Pro
       45                  50                  55

Cys Thr Glu Gly Lys Glu Tyr Met Asp Lys Asn His Tyr Ala Asp Lys
   60                  65                  70                  75

Cys Arg Arg Cys Thr Leu Cys Asp Glu Glu His Gly Leu Glu Val Glu
                   80                  85                  90

Thr Asn Cys Thr Leu Thr Gln Asn Thr Lys Cys Lys Cys Lys Pro Asp
               95                  100                 105

Phe Tyr Cys Asp Ser Pro Gly Cys Glu His Cys Val Arg Cys Ala Ser
           110                 115                 120

Cys Glu His Gly Thr Leu Glu Pro Cys Thr Ala Thr Ser Asn Thr Asn
       125                 130                 135

Cys Arg Lys Gln Ser Pro Arg Asn Arg Leu Trp Leu Leu Thr Ile Leu
   140                 145                 150                 155

Val Leu Leu Ile Pro Leu Val Phe Ile Tyr Arg Lys Tyr Arg Lys Arg
                   160                 165                 170

Lys Cys Trp Lys Arg Arg Gln Asp Asp Pro Glu Ser Arg Thr Ser Ser
               175                 180                 185

Arg Glu Thr Ile Pro Met Asn Ala Ser Asn Leu Ser Leu Ser Lys Tyr
           190                 195                 200

Ile Pro Arg Ile Ala Glu Asp Met Thr Ile Gln Glu Ala Lys Lys Phe
       205                 210                 215

Ala Arg Glu Asn Asn Ile Lys Glu Gly Lys Ile Asp Glu Ile Met His
   220                 225                 230                 235

Asp Ser Ile Gln Asp Thr Ala Glu Gln Lys Val Gln Leu Leu Leu Cys
                   240                 245                 250

Trp Tyr Gln Ser His Gly Lys Ser Asp Ala Tyr Gln Asp Leu Ile Lys
               255                 260                 265
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Gly Leu Lys Lys Ala Glu Cys Arg Arg Thr Leu Asp Lys Phe Gln Asp
270 275 280

Met Val Gln Lys Asp Leu Gly Lys Ser Thr Pro Asp Thr Gly Asn Glu
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Asn Glu Gly Gln Cys Leu Glu
300 305

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<223> T antigen-originated nuclear transport signal

<400> 24

Ala Pro Lys Lys Lys Arg Lys Val Gly
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